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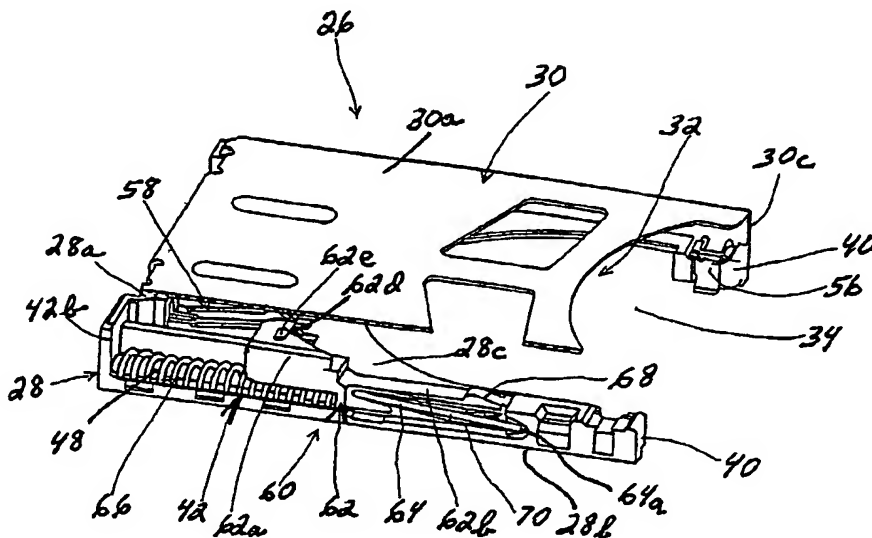
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[Continued on next page]

(54) Title: MEMORY CARD CONNECTOR WITH EJECTOR MECHANISM



(57) Abstract: A memory card connector includes an insulative housing having a rear terminal-mounting section which mounts a plurality of terminals having contact portions for engaging appropriate contacts on a memory card. A metal shell is mounted on the housing and combines therewith to define an interior card-receiving cavity formed by a top plate and opposite side plates of the connector. The cavity has a front insertion opening to permit insertion and withdrawal of the memory card into and out of the connector. The terminal-mounting section of the housing is located at the rear of the cavity. A card ejector mechanism is located at least partially beneath the cavity adjacent one side thereof, whereby the opposite side plates of the metal shell define the opposite sides of the cavity.



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ML, MR, NE, SN, TD, TG).

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INTERNATIONAL SEARCH REPORT

Intern: Application No
PCT/US2004/008528

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01R13/633 G06K13/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01R G06K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 290 136 B1 (KOSEKI YOSHITSUGU ET AL) 18 September 2001 (2001-09-18) column 3, line 34 - line 54; figures 1-7	1
X	US 2002/142640 A1 (ABE KIYOSHI) 3 October 2002 (2002-10-03) paragraph [0027] - paragraph [0028]; figure 1	1
X	US 2002/146923 A1 (YU HUNG-CHI) 10 October 2002 (2002-10-10) paragraph [0005]; figure 4	1
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

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- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

1 September 2004

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INTERNATIONAL SEARCH REPORT

Internat Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>PATENT ABSTRACTS OF JAPAN vol. 2000, no. 20, 10 July 2001 (2001-07-10) & JP 2001 085089 A (KYOCERA ELCO KK), 30 March 2001 (2001-03-30) cited in the application abstract; figures 1-7 -----</p>	2-5

INTERNATIONAL SEARCH REPORT

Int

onal application No.
PCT/US2004/008528**Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-5

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-5

A memory card connector comprising a metall shell formed by a top plate and opposite side plates, an ejector mechanism including a card-slider movable with the card and having a cam slot, one of the side plates of the metal shell includes a spring member for biasing a cam follower pin into the cam slot.

2. claims: 6-16

A memory card connector comprising a metall shell formed by a top plate and opposite side plates, an ejector mechanism including a card-slider movable with the card and having a locking arm that swings up and down into and out of engagement with a locking recess in the overlaying memory card, the metal shell includes a spring member to bias the locking arm into engagement with the recess in the overlaying memory card.

INTERNATIONAL SEARCH REPORT

Internat

Application No

PCT/US2004/008528

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
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US 2002142640	A1	03-10-2002	JP	3443102 B2	02-09-2003
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